

relation to which the grossest mistakes are made, leading to a practice, which, if not in all cases positively injurious, is, to say the least of it, ill calculated to produce favourable results.

"Another form," says Dr. T., "in which we find local hysteria manifesting itself is exhibited in that condition called 'hysterical spine.' If you pass your finger down the spine, you will find some places very irritable; perhaps the painful situation may be confined to one particular spot, or it may extend over three or four spinous processes, or the whole spine may be affected. Wherever it be, you will find that the patient suddenly shrinks as soon as the irritable part is touched, and appears to suffer, and no doubt does suffer exquisite pain. Now this condition has been over and over again mistaken by careless practitioners for disease of one or more of the vertebrae, and in consequence, the unhappy patients have suffered from all the artillery of physic; leeches, blisters, and setons, have been applied to the spine, and other antiphlogistic measures have been resorted to, but without any effect beyond, perhaps, aggravation of the pain. The most important point, by means of which you may distinguish vertebral caries from the hysterical affections, is this: in the vertebral disease the pain is not so excessive, and is always fixed in one part, and it will be found to increase gradually as the disease advances."

D. F. C.

ART. XX.—*History of Medicine, from its Origin to the Nineteenth Century, with an Appendix, containing a Philosophical and Historical Review of Medicine to the present time.* By P. V. RENOUARD, M. D. "The Sciences are gradually developed. It is only by reviewing past centuries that we can determine their laws of growth." Translated from the French by CORNELIUS G. COMEYERS, M. D., Professor of the Institutes of Medicine, Miami Medical College. 8vo. pp. 719. Cincinnati, 1855. J. B. Lippincott: Philadelphia.

A HISTORY of medicine, from the earliest periods to the present time, exhibiting the gradual steps by which it has risen, from the rude empiricism which characterized its early infancy, to its actual condition as a science and an art—and its progressive emancipation from the errors engrafted upon it by ignorance, superstition, mysticism, and the reigning systems of philosophy, has long been greatly needed, for the use of such as are unable to consult the continental works on this subject in their native languages. Even were these to be translated into English, they are, in the main, far too diffuse for the wants of the profession generally, while several of them are so replete with learned research, and bibliographical and verbal criticism as to be adapted only to the tastes of a small class of readers. The work of Dr. Renouard is, we admit, an exception, and we are gratified that it has been placed within the reach of the English reader. Sufficiently full on every topic calculated to throw light upon the history of the healing art, and composed in a truly philosophic spirit; in its general arrangement and style it is well adapted for the use of such as have neither the time nor the disposition to labour through more ponderous tomes, even though replete with learning and antiquarian research.

From the pages of Dr. Renouard, a very accurate acquaintance may be obtained of the history of medicine—its relation to civilization, its progress compared with that of other sciences and arts, its more distinguished cultivators, with the several theories and systems proposed by them; and its relationship to the reigning philosophical dogmas of the several periods. His historical narrative is clear and concise—tracing the progress of medicine through its three ages or epochs—that of foundation or origin—that of transition, and that of renovation.

The first of these ages comprises, according to the arrangement of Dr. R., four distinct periods: 1. The primitive, or that of instinct; ending with the destruction of Troy, 1184 years before Christ. 2. The sacred or mystic; ending at the dispersion of the Pythagorean society, 500 years before Christ. 3. The

philosophic, ending with the foundation of the Alexandrian library, 320 years before Christ; and, 4. The anatomic, ending at the death of Galen, A. D. 200. The second, or age of transition, Dr. R. divides into two periods: 1. The Greek, ending with the burning of the Alexandrian library, A. D. 640; and 2. The Arabic, ending at the revival of letters, A. D. 1400. The third, or age of renovation, he divides also into two periods; the first, or erudite, comprising the 13th and 16th centuries; and the second, or reform period, comprising the 17th and 18th centuries.

Such is Dr. R.'s historical arrangement of medicine; in a professional point of view, it is considered by him under four distinct phases:—

“First, a patriarchal phase, which corresponds to the origin of society—to an epoch when the chief of a family united in himself all power, and was the depositary of traditions.

“Second, a sacerdotal phase, which reigned long in Egypt, and flourished in Greece, from the Trojan war to Hippocrates, and which reappeared in Europe during the Middle Ages.

“Third, an unlicensed lay phase; the worst of all in regard to the dignity and morality of the profession.

“Fourth, a licensed, or organized lay phase; the most perfect of all known professional forms, the most appropriate to the present state of Europe, and the most favourable to the progress of science and art.”

That the reader may understand what precisely the author means by the unlicensed and licensed lay phases of the medical profession, we present the following remarks which occur in connection with his exposition of the deplorable and degraded state of medicine in China:—

“How inconceivable is the stupid indifference of a government which requires no guarantee of knowledge or morality on the part of individuals who are every moment the arbiters of the health and the life of their fellows; whose profession renders them the depositaries of the most sacred family secrets, by giving them easy access to persons of all sexes, ages, and conditions. It is said that physicians in China are, generally, but little respected; nor do they deserve more consideration, excepting those in which the profession is hereditary. This deep discredit into which the Art of Healing is fallen, or rather of those who cultivate it, need not astonish us; it is the natural result of the absence of all law regulating the practice of medicine. The same is true among all nations under analogous circumstances, as this history will prove. We might refer the reader, by anticipation, to the picture that Galen has drawn of the deplorable effects of the medical anarchy which reigned at Rome in his time; we might also refer to the low state of Medicine during the first ages of the feudal period, before the establishment of universities. But, without searching so far back into the annals of the race, it will suffice to place before the eyes of the reader the reflections which such a state of things suggested to the author of the medical law of the 19th of March, 1803.”

“The utility of this consolatory art, says M. Thouret, has been felt among all nations, and in all ages. There exists no government which does not render it a favourable support, and which is not interested, more or less, in its progress. Anarchy, only, which respects no institution, could ignore the importance of the healing art; it belongs to every reformatory government to restore to this branch of instruction its ancient splendour and advantageous results.” “Since the decree of the 18th of August, 1792, which suppressed the universities, faculties, and learned corporations, there is no longer any regulation for the privilege of practising medicine or surgery. The most complete anarchy has taken the place of the former organizations. Those who have studied the art find themselves confounded with those who have not the least notion of it. The lives of citizens are in the hands of ignorant and greedy men; the most dangerous empiricism, and shameless charlatanism impose, everywhere, upon credulity and good faith. No proof of knowledge and skill is required; the country and cities are equally infested with quacks, who deal out poison and death with an audacity that our present laws cannot repress. The most murderous practices have usurped the place of the principles of the art of midwifery. Impudent barbers and bone-setters assume the title of health officers, to cover

their ignorance and greediness. Never has the list of secret remedies, always dangerous, been so extensive as since the suppression of the faculty of medicine. The evils are so grave and so multiplied, that many mayors have sought a means of remedying them, by establishing a kind of jury charged with power to examine the persons who wish to practice medicine in the departments. But these local institutions, independently of the variety of tests of qualification that they have adopted, open the door to new abuses, arising from the superficial nature of the examinations, and sometimes from a still more impure source. It is then urgent to destroy all these evils at once, and to organize a *uniform and regular mode of examination and reception for those who wish to devote themselves to the cure of the sick.*"

Throughout the several ages, periods, and phases of its history, Dr. R. has traced the healing art, from its first rude infancy, when it was left to the necessities of each family, and the instincts which appropriated any feasible remedy for the alleviation of the suffering induced by disease or accident, to its condition at the opening of the nineteenth century, with becoming care, and in that philosophic spirit, which, while it enables the reader readily to appreciate the successive changes the science and practice of medicine have undergone, and the gradual development they have experienced until the attainment of their present more perfect state. He has, at the same time, pointed out to him the causes that have retarded their progress, and occasionally turned them aside from their legitimate path and objects, as well as the means calculated most effectually to insure their establishment in the future on a proper and secure basis.

Dr. R. has endeavoured, throughout the present history, to show that empiricism, or the empirical method, is alone applicable to the proper and successful cultivation of medicine, and that therapeutics, instead of physio-pathology, is the true foundation upon which the science of medicine rests.

The following extracts from the general *resume* which he presents in the twelfth chapter of the work, will afford our readers a general idea of the arrangement of the history, and of the opinions of its author on the subject of the empiric-methodic doctrine which are advocated by him as including all the branches of medical science and uniting them by a natural tie, supported by reason and history:—

"The history of medicine, considered in its totality, from the commencement of society to the present epoch, offers us three principal phases, which we have designated by the names of age of foundation, age of transition, and age of renovation.

"During the first phase, which terminated at the death of Galen, toward the end of the second century of the Christian era, we have seen the healing art commence among all nations in nearly the same manner. We have recognized that it was not a pure invention of the genius of man, but that it owed its origin on one hand to the invincible instinct which leads us to fly from pain and seek means for its relief on the other; to that inclination, eminently social, called sympathy, which impels us to succor our fellows in their sufferings.

"The discovery of the earliest remedies was due to accident, instinct, and experience. But as soon as a knowledge of a certain number of medicaments applicable to some determined diseases had been acquired, it became necessary to arrange this knowledge in an order which would render its application more easy and sure. From that time reason or philosophy united with experience to give perfection to the art. Thus, instinct, accident, and observation laid the first foundations of the scientific edifice, or rather furnished the first materials; reason came next, to polish, cull, and arrange these materials in a suitable manner, and direct observation in the search for new facts.

"Thus far, reason had marched in the rear of experience, or by its side, performing the office of censor or architect, but it did not precede it; it did not pretend, especially, to create itself the material which should serve in the construction of the monument of medicine. But philosophy soon allowed itself to creep upon the steps of observation, which furnished it but too slowly with vague, limited, and very variable information. The philosophers abandoned the long and tortuous path of experience, believing they could reach their aim

more speedily and directly on the wings of intelligence, free from the weight of the senses. The certainty and invariableness of mathematical propositions, the grandeur and beauty of the maxims in morals and natural religion, admirable discoveries, the foundation of all social order, which were regarded as the fruit of the pure perceptions of the mind—these were the motives, very excusable, doubtless, on which they rested, to turn from observation, and seek by the aid of pure mental intuition, the laws which regulate physical phenomena.

"From that time, physicians proposed nothing less than to determine the proximate cause, the principle, the essence of life and diseases, and the intimate action of remedies. They assumed to build upon this basis the scientific monument of Medicine. The more, then, objects appeared to them removed from the grasp of the senses, the more they judged them proper to become a solid foundation for science—one that would be undisturbed by the fluctuations of experience, a mode of acquisition which Hippocrates had qualified as uncertain, *experiencia fallax*. Thence sprung up a crowd of hypotheses and systems, which struggled for supremacy in medicine, from Hippocrates to Galen. Their founders flattered themselves to be able to avoid the uncertainty and gropings of experience, but they fell into a labyrinth of imaginary speculations, and opened an imitable field to controversy. Physicians were divided, like the philosophes, into rival sects, whose disputes only ceased in consequence of political events, and social revolutions. It was during these conjunctures that the physician of Pergamos, having collected what he found best in the writings of his predecessors, composed from them a body of doctrine, conformed to the reigning philosophic ideas, in which we meet, in some degree, all the opinions that had been in vogue, but over which Hippocratic dogmatism predominates.

"The scientific monument of Medicine thus constituted, traversed the *second age*, without undergoing any notable change. The theories of Galen were authority during all this lapse of time; his successors aspired only to the glory of interpreting them, and to add some particular facts, some observations of detail, to the heritages that antiquity had left to them. There was established, we do not know at what epoch, a strange, but salutary opinion, which formed a line of demarcation, a species of antagonism between theory and practice, between reason and experience. The theorist, it was said, must proceed according to logic, and the practitioner must be guided by observation. By means of this singular expedient, or this fiction, false theories and a deceptive science, were preserved for centuries without misleading practice too much; the physician could reason badly, without much injury to his patient, and without depriving himself of the light of experience.

"Such is the aspect which medical doctrine presents at the commencement of the *age of renovation*, and even for a long time afterward. We have seen that at this epoch the human mind awoke from its long torpor, and signalized its revival by numerous discoveries and improvements. Astronomy, physics, chemistry, and natural history underwent a complete revolution, for which they were indebted to the direct observation of phenomena, and the adoption of a logical method, formerly scarcely used, called *induction*. The mathematicians who were never led astray in their abstract speculations, and who had made such beautiful discoveries, reasoning by *deduction*, preserved this logical method, always clearer to meditative minds than to observers.

"The philosophes were divided into two classes—one, including Descartes, Leibnitz, Kant, and their disciples, considered, above all, the activity of the soul in the acquisition of knowledge, and the production of moral acts; they were called *spiritualists*, and remained faithful to the ancient form of reasoning, *deduction*, after freeing it from the pedantic dress of the schools. The other, including Bacon, Locke, Condillac, and their followers, rather regarded the soul as passive, and assumed that all its faculties, and all its acts are derived from sensitive impressions; they are called, on this account, *sensitists*, and adopted, for their general mode of reasoning, *induction*, which they strove to introduce into all the sciences." "The greatest number of physicians adopted the sensitive philosophy. They all pretended to take the sensations, or the sensible phenomena, for the basis of their systems, but all, or nearly all, surpassed, in their theoretic speculations, the horizon of these phenomena, in

which they violated that axiom of modern philosophy, common to sensationalism and spiritualism—*reason has only been given to us to guide experience, and the mind, in attempting to pass the limits of the sensations, mistakes its right and its power*; hence the chimeras and instability of recent medical theories; hence, also, the necessity of prolonging, indefinitely, the divorce of theory and practice, of reason and experience—a divorce which the greatest practitioners of the last centuries have often proclaimed—a divorce whose inconveniences Bignelli was the first to signalize—which Werthof, Morgagni, and Lieutaud, with a small number of other writers, attempted to break, but which will only completely cease when all physicians shall be penetrated with this truth—that beyond rational empiricism there is for science nothing but illusion or hypothesis.

"We have demonstrated that all systems of medicine should be based on therapeutics, which is contrary to the common opinion—for all authors who have been authority, from the successors of Hippocrates to the present epoch, all, I say, excepting the empirics, have endeavoured to found their systems on the laws of physiology." "The authors of these theories have reasoned as follows: To treat a disease properly, we must know its nature. Now the disease being nothing else than a derangement of health, or the physiological state of the body, it is necessary to know in what health consists, in order to appreciate the derangements which take place—that is to say, the diverse pathological states. This reasoning, which appears so just and so natural at first sight, is at bottom only an extremely subtle sophism, which clinical experience contradicts at every step. There is a crowd of diseases whose nature, or mode of formation, escapes entirely our researches, yet which we know very well how to cure—there are others, whose mode of formation is much better known to us, on whose nature we have more exact data, whose treatment is, nevertheless, but little improved thereby."

"To those who pretend to deduce the general rules of treatment from some opinion, or physiological experiment, we would recall the axiom of philosophy already invoked by us more than once: *In the succession of natural phenomena, nothing presents to us the idea of causality, or the necessary relation of cause and effect. But when the succession of one phenomenon after another is constant, the human mind, which observes it assiduously, and which often can foresee it even, is led to believe that these phenomena succeed each other because they are linked together.* Thus, when the cure of an order of diseases follows constantly the employment of a medication, we are led to regard this medication as the cause of the cure which follows its use; but it is impossible for us to perceive the physiological reason of this result, and it is consequently useless to seek it.

"The physiologist must limit himself to describe the functions of the organism, without pretending to seize the proximate cause of these functions; while he does not content himself with depicting the phenomena of the animal economy as they are shown to us by observation, but flatters himself to be able to determine, by analysis, the principle, or essential phenomenon of living beings, he mistakes his rights as well as his powers. He resembles the dog in the fable, that dropped the substance to seize the shadow. He forgets that life is a finished circle, in which, consequently, there is neither commencement nor end. He, alone, who traced this circle, is able to tell us where it commences and where it ends. The man who struggles to resolve this problem, makes greater proof of folly and unmeasured ambition than of depth of mind. Far from being able to determine the principle or essential phenomenon, the object of so many vain speculations and researches, the physiologists have not even been able to assure themselves, by the most delicate observations, if life commences in the solids or liquida; for wherever life exists, we find a combination of liquids and solids, an assemblage of containing parts and parts contained—we cannot even conceive of life without this union." "Thus, therefore, the physiologist must limit himself to the description of the normal phenomena of the living economy—the pathologist to abnormal ones, without either of them aspiring to penetrate the primitive mechanism of these phenomena. So, also, the therapist should base the choice of the curative means he employs, not on the analogies perceptible to the understanding only, but on the material and

sensible analogies. Such is the *résumé* of the empiri-methodic doctrine, toward which the present generation manifestly inclines, notwithstanding some divergencies. It does not require a great prophet to foresee that before a long time shall have elapsed, all medical opinions will unite upon this doctrine. Do we not see researches on specific medications everywhere multiplied? Does not our age owe to this order of researches the discovery of some precious remedies for diseases, and the improvement of several others? To recall but the principal ones, we will cite the extension of the application of the febrifuge, *par excellence*, to all periodic affections; the propagation of vaccination in spite of all physiologic theories; the introduction of iodine and its compounds in the treatment of scrofula and constitutional syphilis; the employment of ergot in inertia of the uterus, and hemorrhages that follow accouchement, the use of tartar emetic in certain forms of pneumonia, etc. etc. Are these not results which speak stronger in favour of the specificity of certain remedies than the sophisms and eloquence of writers who strive to lead the mind in another direction, by taxing as irrational a mode of treatment unanimously recognized as the most efficacious and beneficial? The research for occasional and predisposing causes, that is to say, causes called evident, by the ancient empirics, is it not preferred in some recent books to the research of causes called intimate, constitutive, physiological, and essential? From all these signs, it is easy to foresee that the definite triumph of empiri-methodism, otherwise called rational or philosophic empiricism, approaches.

"But let happen what will, the first among moderns, I have endeavoured to revive the name of the grand empirical school of Alexandria. I have endeavoured to resuscitate, and cause to shine in greatest brilliancy its claims to glory, forgotten or mistaken for two thousand years. I have not been content to reproduce this doctrine; I have sought its enlargement and consolidation, by basing it on new philosophic dogmas of incontestable evidence, sustaining it by historic proofs, sufficient to fasten conviction upon the most resisting minds."

D. F. C.

ART. XXI.—*Principles of Human Physiology, with their Chief Applications to Pathology, Pathology, Therapeutics, Hygiene, and Forensic Medicine.* By WILLIAM B. CARPENTER, M. D., F. R. S., F. G. S., etc. etc. A new American from the last London edition. With two hundred and sixty-one illustrations. Edited, with additions, by FRANCIS GURNEY SMITH, M. D., Professor of the Institutes of Medicine in the Medical Department of Pennsylvania College, etc. 8vo. pp. 902. Philadelphia: Blanchard & Lea, 1855.

In the present edition of Dr. Carpenter's work on human physiology, many important changes have been introduced, in regard, as well to the form of the treatise, as to the matter of its several chapters; it may be looked upon, therefore, somewhat in the light of a new work. The size of the treatise was already so great that, when the additions should be made to it, which the progress of science demanded in order to render it a fair exponent of the present state of physiology, its bulk would become unwieldy and inconvenient, and render it unfit for the use of the student, or as a work of frequent reference to others. The author was, in consequence, induced to transfer so much of the last edition as was devoted to a summary of animal chemistry, and of the structure and actions of the animal tissues, amounting in all to some 240 pages, from the present treatise to the one on general physiology; thus rendering the latter more comprehensive and complete in itself, as well as a more appropriate companion either to the comparative or to the human physiologies of the author. The three works constituting henceforth "as many *independent* but *mutually connected* treatises, on the three great departments into which modern physiology naturally divides itself."

Whatever may be the regret experienced at the omission from the treatise before us of the subjects alluded to—there was no other plan left by which the